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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,384	10/26/2001	Antonius Hendricus Maria Holtslag	NL000547	4617

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EXAMINER

MENGISTU, AMARE

ART UNIT PAPER NUMBER

2673

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,384

Applicant(s)

HOLTSLAG ET AL.

Examiner

Amare Mengistu

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,6-12,14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wakabayashi et al** (2003/0193449 A1) in view of **Salters et al** (2001/0040436).

As to claims 1,6-12,14,15, **Wakabayashi et al** (hereinafter **Wakabayashi**) discloses a sub-field driven display device (fig.1 (1a)) having a sub-field converter (fig. 1(8)) for converting video signals into sub-field data. **Wakabayashi** did not expressly detailed that the sub-field are weighted and duplicated for achieving a plurality of gray levels as a ternary distributed sub-field weights. However, the patent of **Salters et al** (hereinafter **Salters**) clearly teaches that the sub-field are weighted and duplicated for achieving a plurality of gray levels as a ternary distributed sub-field weights (see, page 5, [0031] and [0033] and alternate light output control patterns in predetermined units of the display (page 2 [0015]; check-board pattern).

Therefore, it would have been obvious to one skill in the art at the time of the at the time of the invention was made to have incorporated the distribution of sub-field weight by duplicating the gray levels as taught by **Salters** into the display system of **Wakabayashi** because this will allow the **Wakabayashi** display to reduce flicker and provide a high quality image display.

3. Claims 2-5, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wakabayashi et al** in view of **Salters et al** as applied to claim*1,6-12,14-15 above, and further in view of **Tajima et al** (6,249,265 B1).

As to claims 2, **Wakabayashi** as modified by **Salters** discloses a ternary distribution of sub-field weights, but failed to teach the weight is symmetrically duplicated or the weights are increased at the center. The patent of **Tajima** teaches that the weight is symmetrically duplicated (see, figs. 36,39, and 40).

As to claims 3, 4, **Tajima** did not teaches that the weights are increased or highest sub-filed at the center of the distribution, but **Tajima** disclose increase or highest weight distribution of the sub-fields at the edges of sub-fields. It would obvious to one skill in the art to increase or highest weight distribution at the center.

As to claims 5, 13, **Tajima** did not expressly detailed the motion compensation means to enhance motion artifact reduction. However, **Tajima** duplicating sub-field method (see, figs. 36,39 and 40) will achieve a motion compensation to enhance the artifact the same way as the applicant.

Response to Arguments

4. Applicant's arguments, see pages 8-10, filed Jan.30,2004, with respect to the rejection(s)of claim(s) 1-15 under USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of **Salters et al** (2001/004036).


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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Mengistu whose telephone number is (703) 305-4880.

The examiner can normally be reached on M-F, T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.


Amare Mengistu
Primary Examiner
Art Unit 2673

A.M

Feb.22,2004